

**Amendments to the Specification:**

Please replace the paragraph beginning on page 16, line 22 with the following paragraph:

Fig. 9 is a depiction of the optical heterodyne detection system of Fig. 2 with another embodiment of a frequency tracking system that utilizes modulation of the optical pre-selector 914 to identify the center frequency of the optical pre-selector instead of direct modulation of the swept local oscillator signal 906. The frequency tracking system depicted in Fig. 9 includes a controller 930, a frequency counter 932, and an optical signal tap 936. The controller, the frequency counter, and the optical signal tap are similar to those described above with reference to Fig. 5 and therefore the descriptions provided above with reference to Fig. 5 apply. The frequency tracking system of Fig. 9 involves modulating (also referred to as dithering) the center frequency of the optical pre-selector passband so that the intensity of the tapped optical signal received by the controller can be compared to the frequency of the swept local oscillator signal, ( $\nu_{LO}$ ), as shown in Fig. 10. Dithering of the optical pre-selector can be accomplished by modulating the drive voltage applied to the optical pre-selector. As described above with reference to Fig. 6, the high point in the intensity versus optical frequency curve 1002 shown in Fig. 10 indicates the actual center frequency (or passband) of the optical pre-selector.